

## CLAIMS

1. A protein comprising the same or substantially the same amino acid sequence as an amino acid sequence represented by SEQ ID NO: 1, or a salt thereof.
- 5        2. A protein consisting of an amino acid sequence represented by SEQ ID NO: 1, or a salt thereof.
3. A partial peptide of the protein according to claim 1, or a salt thereof.
4. A polynucleotide comprising a polynucleotide encoding the protein according to claim 1 or the partial peptide according to claim 3.
- 10       5. The polynucleotide according to claim 4, which is DNA.
6. A polynucleotide consisting of a nucleotide sequence represented by SEQ ID NO: 2.
7. A recombinant vector comprising the polynucleotide according to claim 5.
8. A transformant transformed with the recombinant vector according to claim 7.
- 15       9. A method of manufacturing the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3, which comprises culturing the transformant according to claim 8, forming and accumulating the protein according to claim 1 or the partial peptide according to claim 3, and recovering it.
10. A pharmaceutical comprising the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3.
- 20       11. A pharmaceutical comprising the polynucleotide according to claim 5.
12. A diagnostic agent comprising the polynucleotide according to claim 5.
13. An antibody to the protein according to claim 1, the partial peptide according to claim 3, or a salt of the protein or partial peptide.
- 25       14. An antisense polynucleotide comprising a nucleotide sequence, or a part thereof, complementary or substantially complementary to the nucleotide sequence of a polynucleotide encoding a protein or its partial peptide thereof comprising the same or substantially the same amino acid sequence as an amino acid sequence represented by SEQ ID NO: 1.
- 30       15. A pharmaceutical comprising the antisense polynucleotide according to claim 14.
16. A method of screening a compound or its salt that promotes or inhibits the activity of the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3, which comprises using the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3.
- 35       17. A kit for screening a compound or its salt that promotes or inhibits the activity of

the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3, which comprises the protein or its salt according to claim 1 or the partial peptide or its salt according to claim 3.

18. A method of screening a compound or its salt that promotes or inhibits the expression of a gene for the protein according to claim 1, which comprises using the polynucleotide according to claim 4.

19. A kit for screening a compound or its salt that promotes or inhibits the expression of a gene for the protein according to claim 1, which comprises the polynucleotide according to claim 4.

20. A diagnostic agent comprising the antibody according to claim 13.

21. A pharmaceutical comprising the antibody according to claim 13.

22. A method of quantifying the protein according to claim 1, which comprises using the antibody according to claim 13.

23. A method of diagnosing diseases associated with the functions of the protein according to claim 1, which comprises using the quantification method according to claim 22.

24. A method of screening a compound or its salt that promotes or inhibits the expression of the protein according to claim 1, which comprises using the antibody according to claim 13.

25. A kit for screening a compound or its salt that promotes or inhibits the expression of the protein according to claim 1, which comprises the antibody according to claim 13.

26. The pharmaceutical according to claim 10, 11, 15 or 21, which is a prophylactic/therapeutic agent for a neurodegenerative disease.

27. The diagnostic agent according to claim 12 or 20, which is a diagnostic agent for a neurodegenerative disease.

28. A prophylactic/therapeutic method for a neurodegenerative disease, which comprises administering to a mammal an effective amount of a compound or its salt that promotes or inhibits the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that promotes or inhibits the expression of a gene for said protein or its partial peptide or its salt, or a compound or its salt that promotes or inhibits the expression of said protein or its partial peptide or its salt.

29. A method of inhibiting production of  $\beta$ -amyloid, which comprises administering to a mammal an effective amount of a compound or its salt that promotes the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that promotes the expression of a gene for said protein or its partial peptide or its salt, or a

compound or its salt that promotes the expression of said protein or its partial peptide or its salt.

30. A method of inhibiting cell-death, which comprises administering to a mammal an effective amount of a compound or its salt that inhibits the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that inhibits the expression of a gene for said protein or its partial peptide or its salt, or a compound or its salt that inhibits the expression of said protein or its partial peptide or its salt.

31. A prophylactic/therapeutic method for a neurodegenerative disease, wherein the activity of the protein according to claim 1 or its partial peptide or its salt is promoted or inhibited, the expression of a gene for said protein or its partial peptide or its salt is promoted or inhibited, or the expression of said protein or its partial peptide or its salt is promoted or inhibited.

32. A method of inhibiting production of  $\beta$ -amyloid, wherein the activity of the protein according to claim 1 or its partial peptide or its salt is promoted, the expression of a gene for said protein or its partial peptide or its salt is promoted, or the expression of said protein or its partial peptide or its salt is promoted.

33. A method of inhibiting cell-death, wherein the activity of the protein according to claim 1 or its partial peptide or its salt is inhibited, the expression of a gene for said protein or its partial peptide or its salt is inhibited, or the expression of said protein or its partial peptide or its salt is inhibited.

34. Use of a compound or its salt that promotes or inhibits the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that promotes or inhibits the expression of a gene for said protein or its partial peptide or its salt, or a compound or its salt that promotes or inhibits the expression of said protein or its partial peptide or its salt, for the manufacture of a prophylactic/therapeutic agent for a neurodegenerative disease.

35. Use of a compound or its salt that promotes the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that promotes the expression of a gene for said protein or its partial peptide or its salt, or a compound or its salt that promotes the expression of said protein or its partial peptide or its salt, for the manufacture of a  $\beta$ -amyloid production inhibitor.

36. Use of a compound or its salt that inhibits the activity of the protein according to claim 1 or its partial peptide or its salt, a compound or its salt that inhibits the expression of a gene for said protein or its partial peptide or its salt, or a compound or its salt that inhibits the expression of said protein or its partial peptide or its salt, for the manufacture of an

cell-death inhibitor.